

Stop Tweed Expansion 2019 Fact Sheet

Please contact your state representatives and tell them of your concerns. You can use the data presented here.

Testimony is still being accepted on H.B. 7143, An Act Concerning the Length of Runway 2-20 at Tweed-New Haven Airport. Here is the full text of the bill: <https://www.cga.ct.gov/2019/TOB/h/pdf/2019HB-07143-R00-HB.PDF> which will remove all limits to runway and airport expansion, and allow Tweed-new Haven Airport Authority to sell bonds to raise funds for expansion. Testimony may be emailed to tratestimony@cga.ct.gov, before March 25.

Asthma:

- New Haven has a significant asthma problem. New Haven ranked 7th amongst cities nationwide with the highest estimated asthma prevalence and 24th amongst the most challenging places to live with asthma.¹
- 3,291 children in New Haven have asthma.²
- 2009 study reported in Science Daily indicates that emissions of ultrafine particles at small airports were significantly higher than background pollution levels. From the airport, pollution levels were up to 10 times higher at a downwind distance of one football field and up to 2.5 times higher six football field-lengths away. The scientists concluded that 'current land-use practices of reduced buffer areas around local airports may be insufficient.'³
- Asthma is a significant health concern: leading to fatigue, underperformance or absence from school or work, inability to exercise, leading to other health problems such as high blood pressure or weight gain, permanent problems with your lungs, repeated visits to the hospital, psychological problems including stress, anxiety and depression; and learning problems in children.⁴

Lead:

- New Haven has a significant lead issue: there are 10,630 pre-1940 rental housing units which is 32% of all renter occupied units. The total of all renter occupied housing units is 33,176 with a median of 1955 as the year of construction.⁵

1 https://law.yale.edu/system/files/area/center/ghjp/documents/asthma_quick_facts_sheet_november_2018.pdf

2 <https://www.newhavenct.gov/civicax/filebank/blobdload.aspx?blobid=32055>

3 <https://www.achooallergy.com/blog/small-airport-pollution/>

4 <https://www.healthdirect.gov.au/complications-of-asthma>

5 www.newhavenlead.com

Stop Tweed Expansion 2019 Fact Sheet

- General aviation at Tweed uses leaded avgas. Robinson Aviation sells leaded avgas. A 2011 Duke University study found that children living within 500 meters of an airport where leaded avgas is used have higher blood lead levels than other children, with elevated lead levels in blood found in kids as far as one kilometer away.⁶
- St. Bernadette's School, Nathan Hale School, East Shore Park including Hannah's Dream playground for children with disabilities, and Lighthouse Park are all within one kilometer from Tweed. Small daycare programs are also located in this area, such as Cathy's Clubhouse.
- Lead significance: Some of the health effects of repeated exposure to lead include damage to the central nervous system, kidneys and red blood cells, and decreased function in the cardiovascular and immune systems. Lower IQ levels and learning disabilities can also result from lead exposure, especially in children, whose young bodies are more sensitive than those of adults. And scientists at the National Toxicology Program have concluded that lead and lead compounds are "reasonably anticipated to be human carcinogens."⁷

Lung Cancer:

- New Haven county has the highest lung and bronchus cancer in Connecticut.⁸
- We know that correlation is not causality. Certainly, the East Shore neighborhood is bounded by the intersection of Interstate 95, Tweed-New Haven Airport, and the GNHWPCA.
- The Greater New Haven Water Pollution Control Authority (GNHWPCA) is the Regional Sewer Authority that provides sewer service to the communities of New Haven, Hamden, East Haven, Woodbridge, and a portion of North Branford. The facility, located on the shore of the New Haven Harbor, treats approximately 40 million gallons per day (MGD) of raw sewage and it is the second largest wastewater treatment plant in Connecticut.
- Reasonably considered, these combined emissions may increase respiratory distress, as well as lung and bronchus cancer rates in New Haven and the East Shore.

Noise:

- A Noise Analysis is required by the FAA when aircraft noise exceeds 65db outdoors and interior noise levels must be Day-Night Average Sound Level

⁶ <https://www.scientificamerican.com/article/lead-in-aviation-fuel/>

⁷ www.newhavenlead.com

⁸ <https://statecancerprofiles.cancer.gov/map/map.withimage.php?09&001&047&00&0&01&0&1&5&0#results>

Stop Tweed Expansion 2019 Fact Sheet

(DNL) of 45 or greater. Home remediation is required within those noise “contours.” Tweed conducted a noise study in 2014 and identified these noise levels. They use Sound Exposure Level (SEL) as a metric of decibel level over time. During the study, aircraft measuring 95 db were identified.

- 184 homes have had required installed as of 2017: insulated windows, doors, upgrades to air conditioning and more.
- There have been no communications regarding any of the recommended programmatic measures, such as pilot awareness programs, installation of noise monitors, and provisions to update the noise environment have been evaluated or implemented.
- Noise significance: Excessive noise elevates stress levels in humans, animals and plant life. “Nonauditory effects of noise exposure are those effects that don’t cause hearing loss but still can be measured, such as elevated blood pressure, loss of sleep, increased heart rate, cardiovascular constriction, labored breathing, and changes in brain chemistry. According to the WHO *Guidelines for Community Noise*, “these health effects, in turn, can lead to social handicap, reduced productivity, decreased performance in learning, absenteeism in the workplace and school, increased drug use, and accidents.”⁹ The World Health Organization and a North Atlantic Treaty Organization working group to conclude that daycare centers and schools should not be located near major sources of noise, such as highways, airports, and industrial sites (World Health Organization 2000; North Atlantic Treaty Organization 2000).

Greenhouse Gases and Other Noxious Emissions

- The aviation industry accounts for 2-3% of global carbon emissions. Aviation-related greenhouse emissions are generated in three primary ways, by aircraft, by customer travel/ground access to and from the airports, and by energy use and fuel combustion for operations at the airports.¹⁰
- New Haven has a goal of 55% reduction of 1999 emissions levels by 2030. Yet, there is no mention of the greenhouse impact of Tweed-New Haven Airport anywhere in the Climate and Sustainability Framework, either baseline data or with emissions projections alongside their increased flights projections.¹¹

Stormwater Runoff, Sea Level Rise and Extreme Weather:

9 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1253729/>

10 Upgrading to World Class: The Future of the Region’s Airports Revisited, Regional Plan Association, from RPA’s Fourth Regional Plan for the New York-New Jersey-Connecticut metropolitan area, June 2018

11 <https://www.newhavenct.gov/civicax/filebank/blobdload.aspx?blobid=31458>

Stop Tweed Expansion 2019 Fact Sheet

- New 2019 flood map has been released for New Haven. Because of the latest reports on climate change, it is predicted that a category 1 hurricane could flood the entire coastal floodplain of Tweed Airport with more than 3 feet of water.¹²
- Impervious surfaces like paved runways create problems with stormwater runoff: 60% of the Airport Plan is already impervious surfaces.¹³
- **Stormwater runoff calculations:** 1" of rain on 150,000 sq. ft. (1,000' paving x 150' wide runway) = 91,800 gallons of additional water not being infiltrated in that area but rather running off into the wetlands at the South end of Runway 2-20. We average just about 4" a month of rain or 44"/year. However, last year we had a 4" rain storm which is a 50-year storm event.¹⁴
- There is a 15% slope from the North end of the runway/property to the South end, where additional paving would occur. The South end has sandy loam to clay loam soil, causing "moderately high" runoff.¹⁵
- Wetlands act like sponges by holding flood waters and keeping rivers at normal levels. Wetlands filter and purify water as it flows through the wetland system. Plants found in wetlands help control water erosion.¹⁶
- NASA has been saying that storms are getting stronger. Winds are getting stronger. Tidal surges and flooding are growing higher. Storms are getting wetter. The paths of storms are shifting and changing.¹⁷
- Sea rise in the Cove is expected to be 20 inches by 2050 and that does not include storm surge. – Giovanni Zinn, City Engineer

Natural and Protected Lands Nearby

- Morris Creek Nature Preserve
- Lighthouse Park
- East Shore Park
- Fort Nathan Hale Park

12 <https://floodiq.com/poi/639004dd2d2c64d8f1db666b43441c19>

13 <https://swcweb.epa.gov/stormwatercalculator/topography>

14 <https://swcweb.epa.gov/stormwatercalculator/topography>

15 <https://swcweb.epa.gov/stormwatercalculator/topography>

16 <https://www.epa.gov/wetlands/coastal-wetlands>

17 <https://earthobservatory.nasa.gov/Features/ClimateStorms/>

Stop Tweed Expansion 2019 Fact Sheet

- Fort Wooster Park
- # gallons of water flow through Morris Creek, directly through the Tweed Airport Authority coastal floodplains, into the swimming area at Lighthouse Park
- Change in elevation from North to South area of airport, creating “water slide” on tarmac into Creek
 - Tweed boosters state that the runway is grooved, so water travels sideways off the tarmac. However, the entire field slopes South. So, the water slide analogy holds true.
- Tweed has purchased and leveled home, planting grassy monocultures.
- Tweed has cut down trees. Tweed has pursued the authority to use eminent domain to cut down additional trees, on private residential property.

Wildlife and Protected Species

- The developed portions of the Airport contain an area of approximately 200 acres of wildlife habitat along the runways and taxiways, while adjacent undeveloped habitat encompasses an area of approximately 550 acres, for a collective total of ~750 acres of viable wildlife habitat.¹⁸
- Hawk migration: <https://newengland.com/yankee-magazine/travel/new-england/raptors/>
<https://www.nhregister.com/connecticut/article/New-Haven-to-hold-17th-annual-Migration-Festival-11325170.php>
- State-listed Endangered and Threatened Species or Species of Special Concern
 - Great Egret (*Ardea albus*) Threatened
 - Snowy Egret (*Egretta thula*) Threatened
 - Least Tern (*Sterna antillarum*) Threatened
 - Sharp-shinned Hawk (*Accipiter striatus*) Endangered
 - American Kestrel (*Falco sparverius*) Special Concern

¹⁸ Tweed New Haven Airport Authority, Environmental Assessment Wildlife Hazard Deterrent Fence, prepared by Hoyle, Tanner & Associates, Inc., January 28, 2013, Page 6

Stop Tweed Expansion 2019 Fact Sheet

- Northern Harrier (*Circus cyaneus*) Endangered
- Horned Lark (*Eremophila alpestris*) Threatened
- Northern Parula Warbler (*Parula americana*) Special Concern
- Aquatic diamond back terrapins (*Malaclemys t. terrapin*), a turtle species which utilizes the narrow strip of coastal habitat along ocean edges, may use areas along the Haul Road between Ora Avenue. -- This is now unlikely due to the blockage of turtle movements upstream by the Morris Creek tide gate located downstream and west of South End Road
- Medium- to large-sized mammal species (such as deer, coyote, raccoon, opossum, red fox, and striped skunk).
- USDA/Wildlife Services staff has observed ten (10) species of mammals, 100 species of birds, and two (2) species of reptiles on Airport property.

Special Populations

- **Nathan Hale School**, 500 students
- **St. Bernadette School**, 124 students
- **East Shore Senior Center**
- **Hannah's Dream playground**
- **Shoreline Clinical Day School** (Dodge Ave., East Haven) - within the 65 db noise contour!
- Proximity to airport - 600 meters

Budget:

- Federal deficit: The 2019 U.S. budget deficit is estimated at \$310.3 billion. ¹⁹
- State deficit: The state deficit for 2019 budget year is estimated at \$387 million. ²⁰

¹⁹ <https://www.cbsnews.com/news/federal-budget-deficit-leaps-77-percent-so-far-for-fiscal-2019/>

²⁰ <https://www.ctpost.com/news/article/State-deficit-continues-to-grow-12878971.php>

Stop Tweed Expansion 2019 Fact Sheet

- City deficit: New Haven Board of Education is facing a \$30 million deficit in 2019.²¹ While the City of New Haven has borrowed funds to cover ongoing operating expenses: \$160 million in “scoop and toss.”²²
- With all of these deficits, surely we can make the hard decision that we don’t “need” airport expansion.

Report of the Blue Ribbon Budget Review Panel, delivered to the New Haven Board of Alders, June 30, 2009, Findings on Tweed-New Haven Airport Authority:

- The citizens of New Haven receive no quantifiable benefit from Tweed.
 - o The majority users of Tweed tend to fall into two categories:
 - Individual and corporate owners of private planes.
 - Business travelers employed by suburban companies.
 - o Citizens of New Haven are unlikely to fall into either of those categories.
- Tweed is unlikely to become self-sustaining any time soon.
 - o An industry expert estimates that Tweed would require 300,000-400,000 departing commercial passengers annually to break even.
 - o The current figure is around 20,000.
 - o The ground transportation infrastructure around Tweed could not support that level of traffic.
 - o The suburban neighborhoods around Tweed would not put up with that increase in noise and disturbance.
- There is no direct financial upside to Tweed.
 - o All profits generated by FAA-supported airports must be re-invested in the airports themselves, so the city can never realize a profit from the airport.

21 https://www.newhavenindependent.org/index.php/archives/entry/frac_schools/

22 https://www.newhavenindependent.org/index.php/archives/entry/capital_budget/

Stop Tweed Expansion 2019 Fact Sheet

- o The town of East Haven receives all property tax revenue from the airport, since all Tweed-based planes are "tied down" or hangared in East Haven town limits.
- Tweed represents a significant potential financial liability for New Haven.
 - o If US Airways leaves, the airport will lose considerable revenue generated by commercial flights.
 - Given the state of the economy and the finances of the carrier in question, it is impossible to predict the likelihood of this event.
 - o If the airport is not maintained to FAA commercial aviation standards, the FAA subsidy will decrease by approximately \$900,000.
 - o The city will be obliged to repay millions of dollars worth of FAA grants if the airport ceases operation altogether.
- There are many opportunities to increase revenue and decrease costs at Tweed.
 - o Some landing fees are well below those at the nearest GA airport, Oxford-Waterbury.
 - o Other usage fees that could be increased:
 - Fuel flowage fee (currently \$0.10).
 - Monthly "tie-down" fee (currently \$85.00).
 - Monthly heated hangar fee (currently \$1,200 with no vacancies).
 - o No information on salaries of Authority staff is publicly available, but other CT airports of a similar size are run with much smaller staffs.
 - o The FAA requires that certain positions be filled, but allows multiple positions to be held by a single individual.
- Small airports like Tweed are a regional resource, not a municipal one.
 - o All other airports in Connecticut are owned and run by the CT Department of Transportation.
 - o There are significant administrative and operational economies of scale to state ownership.

Stop Tweed Expansion 2019 Fact Sheet

- o There are 14 municipal members of the Tweed-New Haven Airport Authority. Only New Haven provides funds for the airport's budget.

Transportation Alternatives:

- Bradley: recent investments
- Sikorsky: state commitment: <https://m.ctpost.com/local/article/State-says-it-will-contribute-47-percent-in-13632039.php>
- Trains: MetroNorth, Acela, high speed train scheduled to Springfield
- Shuttles to Bradley:
- LaGuardia, NY
- JFK, NY
- Providence, RI
- White Plains, NY
- Logan Airport, Boston, MA

Specific Impact of Additional Paving

- **Stormwater runoff calculations:** 1" of rain on 150,000 sq ft. (1,000' paving x 150' wide runway) = 91,800 gallons of additional water not being infiltrated in that area but rather running off into the wetlands. We average just about 4" a month of rain or 44"/year. However, last year we had a 4" rain storm which is a 50 year storm event.²³
- It would cost \$25 million dollars to pave 1,000 feet, because they will be paving on wetlands

Tweed New Haven Airport as a "Good Neighbor"

- The 2019 House Bill 7143 and the 2018 House Bill 5537 both eliminate all paving restrictions. Public statements by Tweed and City leaders have been variable: 6,000 feet to 7,200 feet. Tweed Airport Authority is creating a new Master Plan, seeking to expand facilities and the overall Airport Layout Plan. Preliminary plans indicate the possibility of a new terminal and routing traffic thru East Haven. Overturning

²³ <https://swcweb.epa.gov/stormwatercalculator/topography>

Stop Tweed Expansion 2019 Fact Sheet

the MOA will allow Tweed to make further incursions on the neighborhood's survival with additional negative health and environmental impacts.²⁴

- Tweed New Haven Airport Authority has not been forthcoming with community engagement. After promising to engage the neighbors in a community benefits agreement negotiations in 2018, there has been no outreach to the East Shore Management Team to do so; despite the fact that the ESMT had established a committee to represent the neighborhood's needs.
- Despite assurances, Tweed is already pursuing areas outside of its fence line: purchasing land around it, demolishing houses, and clearing trees and land.

Existing Economic Development Opportunities

- We are uniquely situated between NYC and Boston
- Yale University, with one of the world's greatest universities at the core of our downtown.
- Deep water harbor
- Acela and MetroNorth rail
- Cultural and culinary capital of Connecticut
- Many colleges and universities in the region
- Intersection of two major interstates
- Long Island Sound coastline
- The idea that we must have commercial airlines to survive economically is an exaggeration.

24 http://www.flytweed.com/files/HVN_Master_Plan_Update_RFP_2019.pdf